Zephyr Environmental Corporation

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Environmental Consulting
Member since May 2013

MANAGEMENT AND LEADERSHIP

☒ **Environmental Policy Statement**

As a leading national environmental consulting firm, Zephyr extends our commitment to the environment to the day-to-day operations of our firm and is dedicated to leading by example.

☒ **Environmental Products and Services**

Zephyr Environmental Corporation is a privately held full-service environmental, health and safety firm offering consulting, training, and data systems services to clients worldwide. Working within multiple industries, we specialize in air and water quality, waste management and cleanup issues, incident management, and workplace and community safety. Zephyr has taken great care to build a staff of professionals that satisfies the variety of EHS challenges posed by both our clients' needs and by regulators.

WASTE

☒ **Solid Waste Reduction and Reuse**

Being an environmental consulting firm, our principal products are reports and studies. Our printer is set to automatically print two-sided copies. Additionally, it has capabilities for electronically transmitting reports without any hard paper copies being produced. Project files at Zephyr are electronic with no paper storage unless dictated by client needs.

☒ **Recycling**

All offices and work areas in the 3,600 ft^2 Maryland office space have designated recycling containers. The material is picked up nightly by the housekeeping staff.

ENERGY

☒ **Energy Efficiency**

Zephyr has installed energy saving sensors in each of the offices and workrooms in the Maryland office. It has been projected that the use of such sensors in such a work environment will reduce lighting energy consumption by 50%.

TRANSPORTATION

☒ **Employee Commute**

Zephyr has computer software systems in-place to allow employees to work off-site and avoid commuting on a daily basis into the office. The amount of commuting that is deferred depends on the employee and the nature of ongoing work assignments.

☒ **Efficient Business Travel**

The Zephyr IT department recently completed Polycom HDX telepresence system that allows the Maryland and Austin (HQ) office to meet remotely. It is estimated conservatively that it will eliminate at least 20 roundtrips annually between BWI Airport and Austin/Bergstrom airports. Using the below approach, it was calculated that the introduction of the technology will reduce carbon dioxide (CO2) emissions by 407 kg per roundtrip flight or ***8.14 metric tons*** *annually (assuming the 20 roundtrips).*

The International Civil Aviation Organization (ICAO) has developed a methodology to calculate the carbon dioxide emissions from air travel for use in offset programs. The ICAO Carbon Emissions Calculator allows passengers to estimate the emissions attributed to their air travel. It is simple to use and requires only a limited amount of information from the user.

The ICAO Carbon Emission Calculator requires that the user input the airports of origin and destination for a direct through flight (i.e. a flight which does not have a change of the flight number). This is then compared with the published scheduled flights to obtain the aircraft types used to serve the two airports concerned and the number of departures per aircraft. Each aircraft is then mapped into one of the fifty equivalent aircraft types in order to calculate the fuel consumption for the trip based on the great circle distance between the airports involved in the journey. The passenger load factors, and passenger to cargo ratios, obtained from traffic and operational data collected by ICAO, are then applied to obtain the proportion of total fuel used which can be attributed to the passengers carried. The system then calculates the average fuel

consumption for the journey weighted by the frequency of departure of each equivalent aircraft type. This is then divided by the total number of economy class equivalent passengers, giving an average fuel burn per economy class passenger. The result is then multiplied by 3.157 in order to obtain the amount of CO2 footprint attributed to each passenger travelling between the two airports.